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ABSTRACT

The Social Encounter and Research Curriculum for Humanization (SEARCH) is an individualized social education curriculum for K-3 being developed at Research for Better Schools, Inc. The SEARCH instructional plan is based on a model of cognitive and social development as well as on a child-centered instructional format. Its content is organized according to five psycho-social life functions: self-realizing, governing, producing and consuming goods and services, utilizing environments, and interpreting and generating ideas and events. From these, the students can choose their own instructional focus and activity at their particular developmental level. Thus the SEARCH curriculum encourages students to take an active role in carrying out their instructional tasks and determining their own study routine. The role of the SEARCH teacher is equally demanding, requiring guidance and individualized planning for each student. In SEARCH the teacher is a facilitator of learning, rather than its source. Supplementary materials to the SEARCH curriculum encourage student independence plus responsibility and help teachers to operate and manage an individualized classroom. SEARCH is being developmentally tested at a center city school in Philadelphia, and the preliminary results from both students and teachers are positive. (Author/MK)

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SEARCH: An Individualized Social Education Curriculum

by

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Ever since Dewey[1] first characterized a democratic society as one which "makes provision for participation in its good of all members on equal terms" and called upon education to help bring about such a society, educators have been struggling to provide such participation for students. This struggle has produced low points and high points in educational research and development. One of the most promising high points in this struggle is the increasing trend for creating an instructional atmosphere that accounts for and accommodates differences in individual students. This trend is commonly called individualization.

The desire to individualize learning has generated a great deal of research and a number of models, the oldest of which goes back to Plato. Walberg has described and classified the major models and some of their psychological underpinnings in an attempt to clarify what he calls, "problems of formulating educational goals and setting their priorities..."[2] Indeed, cogent educational goals and priorities should be at the heart of any individualized instructional scheme. However, if individualization is to be practical in the classroom, consideration must be given to other, equally important aspects. SEARCH, the Social Encounter And Research Curriculum for Humanization, is making an attempt to isolate and individualize some of these aspects. Specifically, SEARCH is concentrating on the instructional plan, on classroom management as it relates to the teacher and the student, and on the accompanying instructional materials.

SEARCH is a K-3 curriculum being developed at Research for Better Schools, Inc. SEARCH's principle objective is to provide children with a cognitively and affectively appropriate individualized social education program. In order to do this, SEARCH developers have made certain assumptions about the goals and purposes of learning. First, the student is a developing, creative participant in the process of learning. Second, any system of learning must be responsive to the social and cognitive needs of the child. Third, the educational environment should be sensitive to differences and similarities of students; it should organize diversity rather than replicate uniformity. Last, the role of the media of learning,the teacher and the materials, should allow flexibility so that a variety of instructional modes and methods becomes possible.

In developing a curriculum based on these assumptions, SEARCH has determined four areas which must be attended to in order for individualization to occur. These areas are instructional plan, student roles, teacher roles, and materials. Although they will be described individually, these four areas are not discreet. It is necessary to consider them simultaneously when forming a plan for individualizing the curriculum because changes in one area often cause parallel effects on the others. Unfortunately, this interdependence is rarely stressed in the literature.

The SEARCH Instructional Plan

The SEARCH individualized instructional plan is built on three cornerstones: a framework of cognitive and social development which is based on the work of Piaget, Kohlberg and others; an interdisciplinary content structured for learning and presented to students by five psycho-social life functions; and an individualized classroom management system that stresses the students' active participation and self management.

SEARCH is a developmental curriculum. Its approach to learning is grounded in a belief that there are certain cognitive, moral, and social levels which characterize human development. These developmental levels, although not age-specific, are age-related and represent a progression from simple to more complex operations. As development occurs, an individual performs cognitively, morally, and socially in a qualitatively more sophisticated way from one level to the next. In this regard, SEARCH is based on the work of Jean Piaget, Lawrence Kohlberg, and David Elkind.[3]

Learning activities in SEARCH are sequenced according to the following model of child development:

AGE LEVELS	SEARCH Developmental Levels Cognitive Operations	Social Orientation
Level D (ages 15-18)	Formal Operations - ability to deal with abstraction and to reason according to logical propositions, often by verbal statements alone.	Ideational Relations, values, ideas on the human condition
Level C (ages 12-14)	Transition to early Formal Operations - ability to deal with some forms of abstraction and reason logically with the help of illustration or concerte image.	Ecosystem Relations, inter-group actions
Level B (ages 8-11)	Concrete Operations - ability to deal with concrete images and to see conservation patterns in time, space, causality and logic.	Systemic Relations, group activity
Level A (ages 5-7)	Pre-Operational Thought - ability to deal with personal images emphasizing perception and the emergence of a symbolic language.	Interpersonal Relations

The SEARCH learning activities are based on cognitive, affective, and social operations derived from this model. The activities call upon each child to use operations that are congruent with that child's level of development. For example, a child in Level A is given pre-operational activities such as grouping and sorting; a child in Level B is given concrete operational activities such as sequencing and seriating. Similarly, children in Level A are given more personal adult attention because of their interpersonal social orientation, while children in Level B get more learning reinforcement from the peer group. The variety of cognitive, affective, and social operations derived from the above model enable the SEARCH activities to adapt learning to each child's individual differences. The child's existing capabilities are the foundation; the learning activities add depth, breadth and organization to this foundation while making learning relevant to the child's own reality. The acitvities offer a structured series of didactic, analytic, independent, cooperative, productive, group and demonstrative instructional modes. The student may choose to hear or read a story by himself/herself, he or she may choose to play a game with three other children, or he/she may even become one of twenty children giving a play. All SEARCH activities are designed to enhance the student's particular development at a particular level and to prepare the child for a smooth, effective transition from one level to the next.

Because SEARCH is a social education curriculum, its content is drawn from the social sciences. However, rather than concentrate on specific social science disciplines, SEARCH organizes content according to five psycho-social life functions. These functions reflect five critical social themes and provide a gross interdisciplinary framework for sequencing social studies knowledge. The functions are

Self-Realizing, Governing, Producing and Consuming Goods and Services, Utilizing Environments, and Interpreting and Generating Ideas and Events.

FUNCTIONS AS ADVANCED ORGANIZERS OF CONTENT		
SEARCH FUNCTIONS	GENERAL THEME	RELATED DISCIPLINES
SELF-REALIZING	Personality	Psychology, Sociology, Anthropology
GOVERNING	Order	Political Science, Ethics, Law
PRODUCING AND CONSUMING GOODS AND SERVICES	Value	Economics, Sociology
UTILIZING ENVIRONMENTS	Cosmos	Geography, Political Science, Economics
INTERPRETING AND GENERATING IDEAS AND EVENTS	Culture	History, Anthropology, Religion, Aesthetics, Psychology

Each psycho-social function is taught at each developmental level through six units of study. The units of any one psycho-social function in a specific level all deal with the same general concern, but each unit approaches that concern from a different perspective. This variety is offered so that children will have the chance to experience the social phenomena in each general theme according to their own style of learning and their own interest areas. For an individual student this is a meaningful way to integrate and absorb knowledge.[4] It is also a more personalized way to learn.

SCOPE AND SEQUENCE OF SEARCH UNITS FOR GRADES K, 1 AND 2

LEVEL A

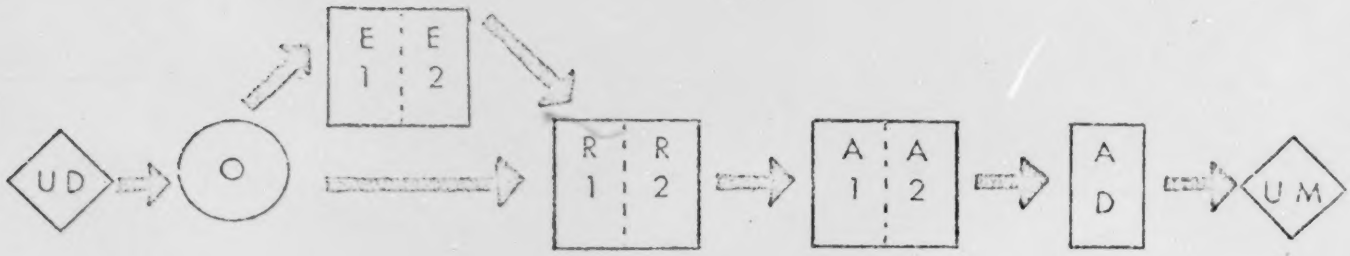
FUNCTION	STAGE I	STAGE II	STAGE III
SELF-REALIZING (S) *Personal Characteristics*	(1) I HAVE A BODY (2) I HAVE AN APPEARANCE	(3) I HAVE SENSES (4) I HAVE FEELINGS	(5) I HAVE AN IDENTITY (6) I HAVE A FAMILY
GOVERNING (G) *Personal Responsibilities*	(1) I CARE FOR MYSELF (2) I CARE FOR MY HOME	(3) I CARE FOR MY CLASSROOM (4) I CARE FOR MY DOG	(5) I FOLLOW RULES (6) I FOLLOW LAWS AND CUSTOMS
PRODUCING AND CONSUMING (P) *Personal Economy*	(1) I USE MY DAY TO DO THINGS (2) I PRODUCE AND CONSUME	(3) I PRODUCE SERVICES (4) I CONSUME OTHER PEOPLE'S GOODS AND SERVICES	(5) I PAY FOR THINGS (6) I SHOP IN A MARKETPLACE
UTILIZING ENVIRONMENTS (U) *Personal Ecology*	(1) I HAVE SURROUNDINGS (2) I TRAVEL IN MY SURROUNDINGS	(3) I MEET PEOPLE IN MY SURROUNDINGS (4) I MAP MY SURROUNDINGS	(5) I MAKE MAPS OF MY SURROUNDINGS (6) I USE TOOLS IN MY SURROUNDINGS
INTERPRETING AND GENERATING (I) *Personal Awareness And Achievement*	(1) I GROW AND CHANGE (2) I SEE THE SEASONS CHANGE	(3) I KNOW SPECIAL DAYS (4) I KNOW SPECIAL PLACES	(5) I KNOW SPECIAL TIMES (6) I KNOW SPECIAL PEOPLE

Because developmental level, not *age* or *grade*, is one of SEARCH's principle cornerstones, the student is given a choice of which functions to study. Likewise, there is freedom to choose the order in which material is to be studied. The one stipulation is that the student studies the units in numerical sequence. In this way, each student assumes some responsibility for sequencing; to some extent, the child is able to map out his or her own learning. One child may focus on one area, Personal Ecology, for example, and study it in great depth. Another child may study one or two units under one function and then go on to another function and another, and so on. The students work their own way through each developmental level. In so doing, they develop appropriate social understanding and cognitive facility with that

understanding. Thus, the knowledge and skills a particular student learns reflect, to a large degree, outcomes based on that child's personal needs, interests, and experiences.

SEARCH's first developmental level, Level A, is divided into three stages. Each stage represents the length of a primary-grade year. There are ten SEARCH units in each stage and there are nine half-hour activities in each unit. Primary-age children (5-7 years old) experience approximately 1 1/2 hours of SEARCH social education a week. In Level A, the information is presented according to the following management plan:

SEARCH Map



At each step in the management plan the child is presented with information relating to the topic at hand. But, at each step, the child is expected to operate in different ways on that information and in different kinds of social settings. For example, in the Unit Diagnostic (a simple placement test) the child is asked questions to determine how much he/she already knows. The Unit Diagnostic involves the individual student and the teacher, with the occasional aid of a cassette tape. The

Orientation activity is given to the entire group, a small group, or an individual student either by the teacher or through a cassette/slide presentation. In this activity the children are expected to listen to and discuss informally their knowledge of the topic at hand. The Encounter activities are the first true, guided instruction that the child receives in a SEARCH unit. In Encounter, the student learns critical imagery and language connected to the topic of the unit through a non-reading, audio-visual presentation. Encounter activities call upon the pre-operational child to name, to locate, or to identify certain objects. The audio-visual presentation can be for the group or for the individual; but it is principally didactic for primary grade children.

In Encounter activities, the child is given a choice. There are two Encounter activities. They are instructionally equivalent but they vary in their media: one Encounter activity is a tape with a booklet; the other is usually a cassette/slide presentation. The choice offered between these two activities is a further effort to accommodate each child's personal learning styles.

Research activities follow Encounter and, as in Encounter, there are two instructionally equivalent, media-varied Research tasks. All Research activities stress problem-solving and investigation at the pre-operational level. The children may choose to put together puzzles, play games, match outline figures, or do other manipulative tasks which require them to group, sort, compare, contrast, exemplify and specify. Research activities are for the individual or for peer-partners, and because they are self-correcting, there is no need for teacher intervention.

The final SEARCH instructional phase is Action. The Action activities are of two types, but both encourage the child to demonstrate new knowledge as it relates back to his/her life. In Action Production the child usually works alone to create a product that shows the unit's information in the context of the child's reality. As in Encounter and Research, each student chooses between two alternatives. Again, both alternatives are instructionally equivalent; they vary according to the kind of product called for, a drawing, a diorama, a clay sculpture, etc. In Action Demonstration, the second type of Action activity, the child also demonstrates the unit material. However, in Action Demonstration students get together to plan and execute dramatic performances such as puppet shows, plays, or pantomimes. The last SEARCH activity is the Unit Measure. This is a post-test, given individually by the teacher or by a cassette tape, in which the child's growth in both information and information processing is measured.

The Student's Role in SEARCH

As Feldhusen, *et al.*, point out, "Children should be afforded experience in selecting ... goals and activities which fit their own needs and interests." [5] The SEARCH rationale would agree that this is true; however, there are additional assumptions about the student's role in SEARCH that underlie the SEARCH instructional plan. Because it is an individualized curriculum, SEARCH views each student's role as something unique within the functioning social system of the classroom. The learner's differences, as well as those characteristics which he/she shares in common with other classroom peers, become the basis of the student's role. The students choose their own instructional focus and activity. They are encouraged to initiate most of their own instructional tasks and to

determine their own study routine and schedule. In short, SEARCH students are regarded as the persons primarily responsible for their own learning. Furthermore, they are active participants in that learning; learning that is shaped by their own personal experience and reality.

The Teacher's Role in SEARCH

As Furth and Wachs note, "The preparation and the training of teachers is the most important area as far as long-lasting educational change is concerned." [6] In an individualized social education program, the education of teachers is even more critical because it frequently involves introducing teachers to a new role. For the SEARCH teacher that role is a very demanding one as it evolves around a new pedagogical challenge: to create a classroom atmosphere that encourages the child to be an active learner. This challenge frequently involves a change of attitude. Often teachers see a diminishing role for themselves in an individualized classroom. This is not at all true in SEARCH. The role of the SEARCH teacher and the unique demands that spring from that role are very similar to those outlined by Stodolsky[7] in her description of the open classroom teacher:

> "In order to have an educationally satisfactory open classroom, the teacher must be able to prepare materials which can be used by a variety of children, to extend and help develop children's interests, and to tolerate more busyness and noise than one encounters in the traditional classroom. The teacher must be an astute observer of the children and must in some fashion keep track of their work in order to decide when and if to intervene."

In SEARCH the teacher is a facilitator of learning, not the source of it. Therefore, the teacher's first responsibility is to *guide* the students through their activities. Specifically this task involves planning appropriate

activities and objectives for each student. This planning, of course, must be based on extensive record keeping and on the continual monitoring of each individual learner's progress. In addition, the SEARCH teacher must know when to intervene in a child's learning and when to leave the child alone. The teacher should not only be aware of each child's preferences, but also of each child's educational needs. In particular the teacher should be able to delimit the choices available to each child in order to better serve those needs and preferences. So the SEARCH teacher's second responsibility is to be an astute observer of children and to tailor the available activities to each child's personal condition. Lastly, the teacher is responsible for organizing the materials, equipment, and classroom space for multiple instructional activities. In this task the teacher must create an individualized classroom environment in the most literal sense. Displaying materials to allow free access by students, arranging the physical aspects of the room to accommodate groupings of various sizes, and encouraging students to operate and maintain equipment are all important ways for the SEARCH teacher to personalize the classroom.

On paper, the teacher's role in SEARCH seems a tremendously complex and formidable management task. Likewise, the student's role seems rather intricate, particularly when the students are primary school children. However, in practice, both students and teachers work very well with SEARCH. Tryout classrooms have demonstrated that teachers, with the help of a teacher aide, could manage as many as nine separate group and/or individual SEARCH activities simultaneously. Furthermore, SEARCH teachers were able to cycle different students or groups into varying, appropriate activities and to provide assistance and guidance to students as needed. Tryouts also showed that even kindergarten students mastered the management procedures, which involved identifying, storing, and retrieving materials.

They readily learned to choose from among instructional alternatives and were able to work with minimal or moderate supervision. There was an increase in relevant peer interaction and in the learning interactions between students and their teacher. Finally, they were eager to keep a record of their own instructional progress.[8] The pivotal components that make SEARCH work smoothly in the classroom seem to be the SEARCH management system described above and the SEARCH materials

The SEARCH Materials

The SEARCH materials have two interrelated functions. On the one hand, they function to help the teacher operate and manage an individualized classroom. Their second function is to help children learn effectively in an individualized classroom with minimum frustration. Toward both of these ends, the SEARCH materials are carefully designed, produced and packaged. All vocabulary is carefully chosen; game and puzzle layouts, goals, and instructions are clearly defined; and graphics and tape scripts are rigorously planned in order to conform to developmental guidelines and to promote ready implementation. The SEARCH materials are attractively and conveniently packaged for easy student or teacher storage and retrieval. They are flexible enough to allow a number of instructional activities to take place simultaneously and they are adaptable to many group sizes and settings. SEARCH materials encourage student independence and responsibility because they are generally self-managing, self-correcting, and self-explanatory. They offer a variety of learning experiences in a structured, easily managed fashion. Each unit provides ten self-contained, instructional activities which utilize at least five different kinds of materials. These materials require different cognitive, manipulative, and social operations, and each activity presents a different learning experience.

The exact nature and function of the SEARCH materials is best illustrated in a specific SEARCH unit. Unit G4, I CARE FOR MY DOG, is the fourth unit in the Governing Function.

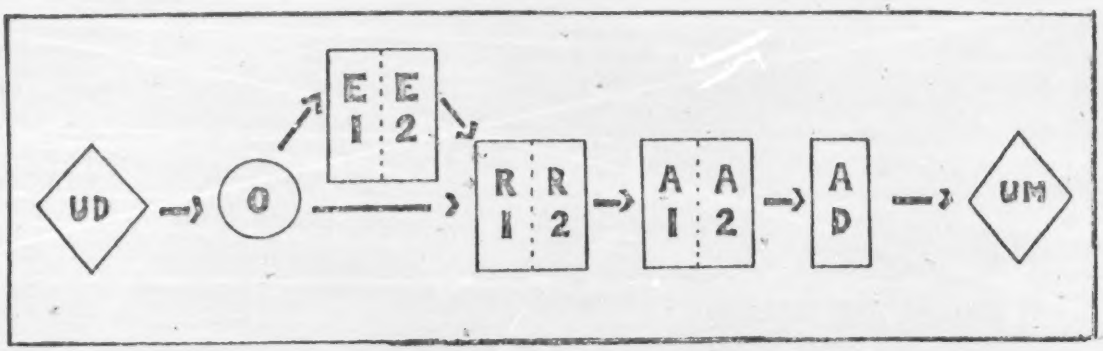
GOVERNING (G) Personal Responsibilities	① I care for myself ② I care for my home	③ I care for my classroom ④ I care for my dog	⑤ I follow rules ⑥ I follow laws and customs

At the pre-operational level, the Governing Function deals with Personal Responsibilities. In this Governing unit, the student is introduced to the notion of personal responsibility to a living being. The student learns some fundamental rules for the proper care of a pet, in this particular case a fictitious, talking dog named Ralph. The concepts and objectives for G4 are as follows:

	CONCEPT	OBJECTIVE
Encounter: Phase	I care for my dog by being responsible for it.	*Identifies* the following ways to take care of a dog: 1) feeding it 2) keeping it safe 3) giving it a place to live
Research: Phase	I can find out the best way to be responsible for my dog.	Given situations, the child *specifies* best way to feed (regularity, appropriate food), protect (license, medical care, safety) and shelter of a dog.
Action: Phase	I can show the best way to be responsible for my dog.	*Demonstrates* different situations which are the best ways to feed, protect, and shelter a dog.

The SEARCH materials for G4 are packaged in a unit box which the teacher displays in the classroom. Inside the box there are ten divider cards, one for each activity in the unit. The divider cards give the students graphic instructions about where to find the materials they need. The materials are either in the unit box or, in the case of slides and cassettes, in the teachers' manual. Boxed materials are packaged in envelopes. Each envelope is labeled in color with an activity code: a white "UD" diamond, a red "O" circle, a green "El" rectangle,

a blue "R1" rectangle, a yellow "A1" rectangle, and so forth along the SEARCH map. Graphics on each envelope show the contents of the envelope, things needed that are not in the envelope, how to use the materials in the envelope, and what to do when finished. Before beginning SEARCH the students are given a series of START lessons which explain all the self-managing aspects of SEARCH. These lessons are always available as refresher courses or for students newly entering SEARCH.



The student begins Unit G4 with a Unit Diagnostic Test. The materials for this placement test include two booklets, two cassettes, a tape player, and a pencil. In this particular cassette/booklet activity the student meets both Ralph and his nemesis, Malcolm the cat. The test questions are taped and the student is asked to mark pictures in the booklet that are relevant to the Encounter concept and objective.

For Orientation, the student is instructed by a card that divides the UD envelopes from the next activity's envelopes to retrieve the needed materials from the teacher. In this case the materials are slides and a cassette tape which orient the student to the upcoming activities and provide motivation.

Students who do not master the diagnostic test go on to choose one of two Encounter activities. Those who do master it begin Research activities. In G4, Encounter 1 is another slide/cassette presentation and Encounter 2 is a cassette with the alternative visual device of a comic booklet. Ideally, the child listens to the tape, relates it to the visuals, and learns the imagery and language needed to grasp the concept of pet care.

All students do Research activities. The G4 Research activities offer a choice between two "finish-the-story" puzzles: one is a door game, and the other is a comic strip game. In both activities the student must determine which answers show acts of being responsible for Ralph the dog.

Following Research, the students choose between two Action activities which involve some materials typical of the primary classroom. Each student is provided with cut-outs of Ralph, poster paper, paste and crayons. They are instructed to illustrate the situations called for in the Action objective. This may be done by making posters or dioramas. The students are encouraged to relate this task to their own personal experiences. Action activities stress creative play as the vehicle for relating activities involving a talking dog to a child's real life, while the demonstration segment encourages each student to use drama to draw the parallels between classwork and reality. Unit G4 ends with the Unit Measure, a mastery test. The materials for the Unit Measure are the same as those for the Unit Diagnostic: cassettes, booklets, tape player, and pencil. This alternate test form is also given on tape.

Results and Projections

The true test of SEARCH and the effectiveness of the SEARCH materials lies in the classroom. The G4 Unit, I CARE FOR MY DOG, was tested as a

developmental product with twenty-seven first graders at a center city school in Philadelphia. Although the results of this test are far from conclusive, the observations are encouraging. These materials were stimulating and enjoyable for the students. Furthermore, the instructional activities, Encounter, Research, and Action, were well received and the students responded with interest and enghusiasm. The teacher noted ambiguity in some materials but saw little difficulty for herself or the students in physically using them. She also indicated that she was able to monitor or assess student performance throughout the instruction.[9]

Based on such classroom observations, this unit, along with all SEARCH Stage II units, was revised. The revised materials were reviewed by an outside consultant, a specialist in the field of primary social studies. His assessment of the materials and the unit was positive and quite encouraging. He felt that children would enjoy the material, they would be motivated by it, and they would learn from it.

This SEARCH unit, I CARE FOR MY DOG is being tested again in a classroom this academic year. This second version reflects both the revisions called for by the first tryout test and the suggestions made by the outside consultant. After this second classroom test, the unit will again be revised and further tested. Every unit in SEARCH and all the attendant materials that SEARCH produces are submitted to this evaluation cycle. Each test, outside review, and subsequent revision results in a closer approximation of the final individualized product.

Conclusion

SEARCH, developers have undertaken as their major mission the development of an individualized social education program. To accomplish this mission, they have devised a unique instructional plan that is based on a model of cognitive and social development as well as on a child-centered instructional format. They have also devised a management system that will enable teachers to individualize their classrooms more effectively and that will help students to learn in an individualized environment without frustration. Finally, they are designing and producing materials that challenge and motivate students and that help teachers implement an individualized social education curriculum. SEARCH is being developmentally tested in an urban setting and the preliminary results indicate that the SEARCH developers are well on the way to accomplishing their mission.

FOOTNOTES

1. John Dewey. *Democracy and Education*. New York: The Macmillan Company, 1964, p. 99.

2. Herbert Walberg. "Psychological Theories of Educational Individualization" in Harriet Talmage (Ed.), *Systems of Individualized Education*. Berkeley, Ca.: McCutchan Publishing Corp., 1975, p. 14.

3. David Elkind. *Children and Adolescents: Interpretive Essays on Jean Piaget*. New York: Oxford University Press, 1970; Lawrence Kohlberg and Rochelle Mayer. "Development as the Aim of Education"; *Harvard Educational Review*, (vol. 42, no. 4) November 1972, pp. 449-496. Jean Piaget and Barbel Inhelder. *The Psychology of the Child*. New York: Basic Books, 1969.

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6. Hans G. Furth and Harry Wachs. *Thinking Goes to School: Piaget's Theory in Practice*. New York: Oxford University Press, 1974, p. 279.

7. Susan S. Stodolsky. "Identifying and Evaluating Open Education"; *Phi Delta Kappan*, (vol. 57, no. 2) October 1975, pp. 113-114.

8. Barbara Z. Presseisen, Joseph J. D'Amico, and Edward M. Patrick. "Individualizing the Curriculum: The SEARCH for research-based classroom practice." (in press)

9. Edward M. Patrick. "Materials Tryout Summary Report SEARCH unit G4: I CARE FOR MY DOG." Philadelphia, Pa.: Research for Better Schools, Inc., 1974 (unpublished report).